

WHAT IS CLAIMED IS:

1. A remote start control apparatus, which is installed
in a vehicle equipped with a start control apparatus, for fetching
5 a predetermined code that is output based on a predetermined
operation, for determining whether the predetermined code is
a code unique to a vehicle and for, when the codes match, permitting
the starting of machinery, such as an engine, and which starts
the machinery in accordance with an instruction signal received
10 from a transmitter, comprising:

a first storage unit for storing the code unique to the
vehicle;

a first supply unit for, upon receiving from the
transmitter a start instruction signal for the machinery,
15 supplying the code stored in the first storage unit to the start
control apparatus; and

a first memory control unit for, when a determination is
made, based on a specific signal received from a theft detection
unit for detecting a vehicle theft or another signal equivalent
20 to the specific signal, that the vehicle has been stolen, either
deleting the code stored in the first storage unit or rewriting
the code.

2. A remote start control apparatus, which is installed
25 in a vehicle equipped with a start control apparatus, for fetching

a predetermined code that is output based on a predetermined operation, for determining whether the predetermined code is a code unique to a vehicle and for, when the codes match, permitting the starting of machinery, such as an engine, and which starts
5 the machinery in accordance with an instruction signal received from a transmitter, comprising:

a first storage unit for storing the code unique to the vehicle;

10 a first supply unit for, upon receiving from the transmitter a start instruction signal for the machinery, supplying the code stored in the first storage unit to the start control apparatus; and

15 a second memory control unit for, when the disconnection of a battery mounted in the vehicle is detected, deleting or rewriting the code stored in the first storage unit.

3. A remote start control apparatus, which is installed in a vehicle equipped with a start control apparatus, for fetching a predetermined code that is output based on a predetermined operation, for determining whether the predetermined code is a code unique to a vehicle and for, when the codes match, permitting the starting of machinery, such as an engine, and which starts the machinery in accordance with an instruction signal received from a transmitter, comprising:

25 a first storage unit for storing the code unique to the

vehicle;

a first supply unit for, upon receiving from the transmitter a start instruction signal for the machinery, supplying the code stored in the first storage unit to the start
5 control apparatus;

a second storage unit for storing a remote control ID code used for a remote operation; and

a third memory control unit for, when it is determined that a remote control ID code has been registered in the second
10 storage unit, deleting or rewriting the code stored in the first storage unit.

4. A remote start control apparatus according to claim 3, wherein, when it is determined that a code has been registered
15 in the second storage unit, while a first predetermined condition, such as the theft of the vehicle, has been established, the third memory control unit deletes or rewrites the code stored in the first storage unit.

20 5. A remote start control apparatus according to one of claims 1 to 4, further comprising:

a fourth memory control unit for, when a second predetermined condition is established, storing in the first storage unit the predetermined code that is output through the
25 predetermined operation.

6. A remote start control apparatus according to claim
5, further comprising:

a determination unit for determining whether the
5 predetermined code output through the predetermined operation
is an appropriate code for storage in the first storage unit,
wherein, when the determination unit determines that the
predetermined code is an appropriate code for storage in the
first storage unit, the fourth memory control unit stores the
10 predetermined code in the first storage unit.

7. A remote start control apparatus according to claim
6, wherein the determination unit employs the state of the
machinery to perform a determination.

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8. A remote start control apparatus according to one of
claims 1 to 7, further comprising:

a notification unit for issuing a notification that the
code stored in the first storage unit has been deleted or
20 rewritten.

9. A remote start control apparatus according to claim
8, wherein the notification unit issues a notification at a
predetermined time, such as when the performance of the
25 predetermined operation is detected.

10. A remote start control apparatus, which is installed
in a vehicle that is equipped with a start control apparatus,
for fetching a predetermined code that is output based on a
5 predetermined operation and determining whether the
predetermined code matches one of a plurality of unique vehicle
codes and for, when the predetermined code matches one of the
unique vehicle codes, permitting machinery, such as an engine,
to be started and starting the machinery in accordance with an
10 instruction signal received from a transmitter, comprising:

a third storage unit for storing a specific code that
matches one of the unique vehicle codes stored in the start control
apparatus;

15 a second supply unit for, upon receiving a start
instruction signal for the machinery from the transmitter,
supplying to the start control apparatus the specific code stored
in the third storage unit; and

20 a third supply unit for, when a determination is made,
based on a detection signal, or another signal equivalent to
the detection signal, received by a detection unit for detecting
vehicle theft, that a vehicle theft has occurred, supplying
a delete/rewrite instruction signal to the start control
apparatus to initiate the deleting or rewriting of the unique
vehicle code that is stored in the start control apparatus and
25 that matches the specific code.

11. A remote start control apparatus, which is installed
in a vehicle that is equipped with a start control apparatus,
for fetching a predetermined code that is output based on a
5 predetermined operation and determining whether the
predetermined code matches one of a plurality of unique vehicle
codes and for, when the predetermined code matches one of the
unique vehicle codes, permitting machinery, such as an engine,
to be started and starting the machinery in accordance with an
10 instruction signal received from a transmitter, comprising:

a third storage unit for storing a specific code that
matches one of the unique vehicle codes stored in the start control
apparatus;

a second supply unit for, upon receiving a start
15 instruction signal for the machinery from the transmitter,
supplying to the start control apparatus the specific code stored
in the third storage unit;

a second storage unit for storing a remote control ID code
used for a remote operation; and

20 a fourth supply unit for, when it is determined that a
code has been registered in the second storage unit, transmitting
a delete/rewrite instruction signal to the start control
apparatus to initiate the deleting or rewriting of a unique
vehicle code that is stored in the start control apparatus and
25 that matches the specific code.

12. A remote start control apparatus according to claim
11, wherein, when it is determined that the registration of a
code in the second storage unit has been performed, while a first
5 predetermined condition, such as the occurrence of a vehicle
theft, has been established, the fourth supply unit transmits
the delete/rewrite instruction signal to the start control
apparatus.

10 13. A start control apparatus, which permits the starting
of machinery, such as an engine, when it is determined that one
of a plurality of unique vehicle codes stored in a fourth storage
unit matches a specific code that is supplied by a remote start
control apparatus for starting the machinery in accordance with
15 a predetermined code received through a predetermined operation,
or an instruction signal received from a transmitter, comprising:
 a fifth memory controller for, when a determination is
made, based on a detection signal received by a theft detection
unit for detecting a vehicle theft, or another signal equivalent
20 to the detection signal, that a vehicle theft has occurred,
deleting or rewriting one of the unique vehicle codes that is
stored in the fourth storage unit and that matches the specific
code.

25 14. A start control apparatus, which permits the starting

of machinery, such as an engine, when it is determined that one of a plurality of unique vehicle codes stored in a fourth storage unit matches a specific code that is supplied by a remote start control apparatus for starting the machinery in accordance with
5 a predetermined code received through a predetermined operation, or an instruction signal received from a transmitter, comprising:

a sixth memory control unit for, upon receiving a delete/rewrite instruction signal from the remote start control apparatus to delete or rewrite a unique vehicle code that matches
10 the specific code, deleting or rewriting the unique vehicle code that is stored in the fourth storage unit and that matches the specific code.